WO 2005/049769 PCT/EP2004/012257

- 17 -

CLAIMS

- 1. A system for removal of a toxic gas from a powder contaminated with the toxic gas, the system comprising:
- a source of the contaminated powder;

5

10

20 .

- a stripper assembly for stripping at least part of the toxic gas from a batch load of the contaminated powder;
- connecting means for fluidly connecting the source with the stripper assembly for transporting the contaminated powder from the source to the stripper assembly;

wherein the stripper assembly comprises two or more stripper vessels, and the connecting means is arranged to selectively connect the source to one or more of the stripper vessels.

- 2. The system of claim 1, wherein the source comprises collecting means for collecting contaminated powder prior to discharging the collected contaminated powder to the stripper assembly via the connecting means.
 - 3. The system of claim 2, wherein the collecting means is arranged to collect the batch load of the contaminated powder.
 - 4. The system of claim 2 or 3, wherein the collecting means is provided in the form of a collecting vessel or a collecting hopper.
- 5. The system of claim 2, 3 or 4, wherein the collecting means is provided in the form of a sluice vessel for sluicing the batch load from a first pressure to a second pressure different from the first pressure.
- 6. The system of any one of the previous claims, wherein the stripper assembly is provided with purge means arranged to supply a purge fluid to the batch load.

WO 2005/049769 PCT/EP2004/012257

- 18 -

7. The system of any one of the previous claims, wherein the connecting means is arranged to establish gravity-driven transport of the batch load from the source to the stripper assembly.

- 8. The system of any one of the previous claims, wherein the connecting means comprises a split branch unit comprising a main arm conduit fluidly connectable to the source, and at least two distributor arm conduits each of which fluidly connectable to one of the stripper vessels.
- 9. The system of claim 8, wherein at least a first one of the two distributor arm conduits comprises a slanted section extending over a non-vertical trajectory, preferably extending under an angle of between 1° and 30° from the vertical.
- 10. The system of claim 8 or 9, wherein the distributor arm conduits are each provided with a valve, preferably a ball valve, for selectively controlling transport of the powder through the respective distributor arm conduit.
 - 11. A method of de-toxicating a powder contaminated with a toxic gas, wherein de-toxicating comprises at least partially removing the toxic gas from the contaminated powder, and the method comprises the steps of:
 - providing a stripper assembly;

20

25

3.0

- transporting the contaminated powder from the source to the stripper assembly;
- stripping at least part of the toxic gas from a batch load of the contaminated powder in the stripper assembly; wherein the provided stripper assembly comprises two or more stripper vessels and wherein transporting the contaminated powder from the source to the stripper -assembly includes:
 - selecting one or more of the stripper vessels; and
 - transporting the contaminated powder to the selected one or more stripper vessels.

WO 2005/049769 PCT/EP2004/012257

5

. 10

- 19 -

12. The method of claim 11, wherein, prior to the step of transporting the contaminated powder from the source to the stripper assembly, the batch load of the contaminated powder is collected in a collecting vessel, and wherein transporting the contaminated powder from the source to the stripper assembly includes transporting the contaminated powder from the collecting vessel to the stripper assembly.

13. The method of claim 11 or 12, wherein, simultaneously to said steps, a preceding batch load of the contaminated powder is being stripped in an unselected stripper vessel.